IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Serial No: 10/816,789
Filing Date: 3/31/2004
Inventorship: ..... Thamer A. Abanami, et al.
Assignee: ..... Microsoft Corporation
Confirmation No: 9919
Group Art Unit: 2168
Examiner: ..... Sangwoo Ahn
Attorney's Docket No.: MS1-1935US
Title: .....USER-CONFIGURABLE DEVICE STORAGE SYNCHRONIZATION MANAGER

DECLARATION UNDER 37 C.F.R. § 1.131

The undersigned inventor hereby declares as follows:

1. My residence, post office address and citizenship are as stated below next to my name.

2. I am the inventor of the invention described and claimed in U.S. Patent Application Serial No. 10/816,789, entitled "User-Configurable Device Storage Synchronization Manager".

3. I conceived of the claims disclosed in the above-referenced patent application prior to December 23, 2003, the filing date of Hurwitz et al. (U.S. Patent App. Pub. No. 2005/0147130). Attached hereto as **Exhibit A** are the claims associated with my invention, which I conceived prior to December 23, 2003.

4. My invention is documented by an invention disclosure document prepared prior to December 23, 2003. Attached hereto as **Exhibit B** is a redacted copy of a disclosure document. This document provides a description of the

invention. Non-essential portions of Exhibit B have been redacted. As shown in Exhibit B, the claimed subject matter as recited in Exhibit A was conceived at least as early as March 24, 2003 ("Date of Conception"). Exhibit B supports Claims 1-2, 4, 6-27 and 29-36 of the instant application, as presented in Exhibit A.

5. My invention is documented by a second invention disclosure document prepared prior to December 23, 2003. Attached hereto as **Exhibit C** is a redacted copy of a second disclosure document. This document provides a description of the invention. Non-essential portions of Exhibit C have been redacted. As shown in Exhibit C, the claimed subject matter as recited in Exhibit A was conceived at least as early as March 24, 2003 ("Date of Conception"). Exhibit C supports Claims 1-2, 4, 6-27 and 29-36 of the instant application, as presented in Exhibit A.

6. In accordance with MPEP 715.07(a), diligence is evidenced by the subsequent preparation and filing of this U.S. Patent Application on March 31, 2004.

I certify that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that the making of willfully false statements and the like is punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and may jeopardize the validity of any patent issuing from this patent application.

****

Full name of inventor:	Thamer A. Abanami
Inventor's Signature	_____ Date: 11 / 21 / 08
Residence:	Seattle, WA
Citizenship:	U.S.A.
Post Office Address:	60 E. Lynn St. #G Seattle, WA 98102

Full name of inventor:	W. Michael Anderson
Inventor's Signature	_____ Date: _____
Residence:	Woodinville, WA
Citizenship:	U.S.A.
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Full name of inventor:	Andrew L. Silverman
Inventor's Signature	_____ Date: _____
Residence:	Redmond, WA
Citizenship:	U.S.A.
Post Office Address:	11716 156th Avenue NE Redmond, WA 98052

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Full name of inventor:	W. Michael Anderson
Inventor's Signature	W. Michael Anderson Date: 12/2/08
Residence:	Woodinville, WA
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Full name of inventor:	Andrew L. Silverman
Inventor's Signature	Andrew L. Silverman Date: 11/21/2008
Residence:	Redmond, WA
Citizenship:	U.S.A.
Post Office Address:	11716 156th Avenue NE Redmond, WA 98052

Exhibit A

1. (Previously Presented) One or more processor-readable media having processor-executable instructions that, when executed by a processor, performs acts comprising:

determining a storage capacity of a target device coupled to a source device;

sorting a collection of digital items stored on the source device and dividing the collection into multiple tiers of digital items, wherein each tier is a subset of the collection and the items in each tier have like priorities and the priority of items in one tier differs from the priority of items in the other tiers, the sorting being based, at least in part, upon a user-configurable priority assigned to the digital items in the collection;

designating at least one of the tiers of sorted digital items with highest priority for synchronization with the target device, wherein the storage requirements of the designated tier of digital items are less than or equal to the storage capacity of the target device;

synchronizing the designated tier of digital items with the coupled target device.

2. (Original) One or more media as recited in claim 1 further comprising providing a user-interface which facilitates user-configurable assignment of priority for one or more digital items in the collection.

3. (Canceled)

4. (Previously Presented) One or more media as recited in claim 1, wherein the storage requirements of the collection of digital items is greater than the storage capacity of the target device.

5. (Canceled)

6. (Previously Presented) One or more media as recited in claim 1, wherein the synchronizing further comprises directing the target device to remove a digital item stored thereon but not part of the designated tier of digital items for synchronization.

7. (Previously Presented) One or more media as recited in claim 1, wherein the synchronizing further comprises transferring from the source device a digital item which is part of the designated tier of digital items for synchronization but not already stored on the target device.

8. (Original) One or more media as recited in claim 1, wherein digital items are audio, image, or video files.

9. (Original) One or more media as recited in claim 1, wherein digital items are selected from a group of digital content consisting of audio, image, video, text, hypertext, and data.

10. (Original) A computer comprising one or more processor-readable media as recited in claim 1.

11. (Original) A computing device comprising:

an audio/visual output;

a processor;

one or more processor-readable media as recited in claim 1.

12. (Previously Presented) One or more processor-readable media having processor-executable instructions that, when executed by a processor, produce a user-interface (UI), the UI comprising:

a first display area illustrating a listing of one or more digital items from a collection of digital items stored on a source device, the collection being divided into multiple tiers, wherein each tier is a subset of the collection and the items in each tier have like priorities for synchronization with a target device coupled to the source device and one of the tiers having the highest priority amongst the multiple tiers;

a second display area illustrating a user-configurable priority corresponding to the one or more digital items in the listing;

an executable process associated with the one or more digital items in the listing that is configured to:

determine a storage capacity of the target device;

designate the tier with highest priority, wherein the storage requirements of the designated tier of digital items are less than or equal to the storage capacity of the target device;

synchronize the designated tier of digital items with the coupled target device.

13. (Original) One or more media as recited in claim 12, wherein the storage requirements of the collection of digital items is greater than the defined storage capacity of the target device.

14. (Original) One or more media as recited in claim 12, wherein the user-configurable priority assigned to a digital item is indicated as one of multiple priority tiers.

15. (Previously Presented) One or more media as recited in claim 12, wherein the synchronization further comprises directing the target device to remove a digital item stored thereon but not part of the designated tier of digital items for synchronization.

16. (Previously Presented) One or more media as recited in claim 12, wherein the synchronization further comprises transferring from the source device a digital item which is part of the designated tier of digital items for synchronization but not already stored on the target device.

17. (Original) One or more media as recited in claim 12, wherein digital items are audio, image, or video files.

18. (Original) One or more media as recited in claim 12, wherein digital items are selected from a group of digital content consisting of audio, image, video, text, hypertext, and data.

19. (Previously Presented) A method comprising:

determining a storage capacity of a target device;

sorting a collection of digital items stored on a source device coupled to the target device;

dividing the sorted collection into multiple groups of digital items, wherein the items in each group have like priorities and the priority of items in one group differs from the priority of items in the other groups, the sorting being based, at least in part, upon a user-configurable priority assigned to the digital items in the collection;

designating at least one of the groups of sorted digital items with highest priority for synchronization with the target device, wherein the storage requirements of the designated group of digital items are less than or equal to the storage capacity of the target device;

synchronizing the designated group of digital items with the coupled target device.

20. (Original) A method as recited in claim 19 further comprising providing a user-interface facilitating user-configurable assignment of priority for one or more digital items in the collection.

21. (Original) A method as recited in claim 19, wherein the storage requirements of the collection of digital items is greater than the defined storage capacity of the target device.

22. (Original) A method as recited in claim 19, wherein the user-configurable priority assigned to a digital item is indicated as one of multiple priority tiers.

23. (Original) A method as recited in claim 19, wherein the synchronizing further comprises directing the target device to remove a digital item stored thereon but not part of the designated group of digital items for synchronization.

24. (Original) A method as recited in claim 19, wherein the synchronizing further comprises transferring from the source device a digital item which is part of the designated group of digital items for synchronization but not already stored on the target device.

25. (Original) A method as recited in claim 19, wherein digital items are audio, image, or video files.

26. (Original) A method as recited in claim 19, wherein digital items are selected from a group of digital content consisting of audio, image, video, text, hypertext, and data.

27. (Previously Presented) One or more processor-readable media having processor-executable instructions that, when executed by a processor, produce a user-interface (UI), the UI comprising:

a first display area illustrating a listing of one or more digital items from a collection of digital items stored on a source device, the collection being divided into multiple tiers, wherein each tier is a subset of the collection and the items in each tier have like priorities for synchronization with a target device coupled to the

source device and one of the tiers having the highest priority amongst the multiple tiers;

a second display area illustrating a user-configurable priority corresponding to the one or more digital items in the listing.

28. (Canceled)

29. (Original) One or more media as recited in claim 27, wherein digital items are audio, image, or video files.

30. (Original) One or more media as recited in claim 27, wherein digital items are selected from a group of digital content consisting of audio, image, video, text, hypertext, and data.

31. (Previously Presented) A system comprising:

a storage capacity determining means for determining a storage capacity of a target device coupled to a source device;

a sorting-and-dividing means for sorting a collection of digital items stored on the source device and dividing the collection into multiple groups of digital items, wherein the items in each group have like priorities and the priority of items in one group differs from the priority of items in the other groups, the sorting being based, at least in part, upon a user-configurable priority assigned to the digital items in the collection;

a designating means for designating at least one of the groups of sorted digital items with highest priority for synchronization with the target device, wherein the storage requirements of the designated group of digital items are less than or equal to the storage capacity of the target device;

a synchronizing means for directing the target device to remove a digital item stored thereon but not part of the designated group of digital items for synchronization and for transferring from the source device a digital item which is part of the designated group of digital items for synchronization but not already stored on the target device.

32. (Original) A system as recited in claim 31 further comprising a providing means for providing a user-interface facilitating user-configurable assignment of priority for one or more digital items in the collection.

33. (Original) A system as recited in claim 31, wherein the storage requirements of the collection of digital items is greater than the defined storage capacity of the target device.

34. (Original) A system as recited in claim 31, wherein the user-configurable priority assigned to a digital item is indicated as one of multiple priority tiers.

35. (Original) A system as recited in claim 31, wherein digital items are audio, image, or video files.

36. (Original) A system as recited in claim 31, wherein digital items are selected from a group of digital content consisting of audio, image, video, text, hypertext, and data.

Exhibit B

Microsoft Patent Pre-disclosure Document

Note: Hover the pointer over underlined section headings for more help and click on a link for a sample document.

This section contains items that are required to get the patent process under way

Document Author (name and email):
Thamer A. Abanami thamera@microsoft.com

Title of Invention:
Priority model for automated transfer of subsets of a music collection to a client

[redacted]

Inventor(s):
Thamer A. Abanami

[redacted]

[redacted]

Introduction:

[redacted]

[redacted]

[redacted]

A simple, easy to understand priority model for automatic transfer of parts of a user's digital media collection to a client device. It is clear that some items can be more important than others, and by providing a simple method explicitly and/or implicitly assign transfer items or media heuristics with a transfer priority, things that matter most to the user will always try to end up on the device, things that matter less could be used to dynamically fill the client device, and things the user never wants on the device should never end up on the device.

[redacted]

1. Three easily identifiable and explainable tiers of explicit transfer priority exposed to the user in all in a host system's user experience where digital media items can be managed.

2. Implicit and Explicit prioritization of digital media transfer rules within the three transfer priority tiers.

[redacted]

Exhibit B

Microsoft Patent Pre-disclosure Document

Note: Hover the pointer over underlined section headings for more help and click on a link for a sample document.

[redacted]

Description of the invention:

The focus of this solution is on Music Collections. It can be easily extended to all digital media types in a digital media collection. [redacted]

1. Transfer Priority Designations (Hi, Lo, No)

Three levels of priority for any digital media item or groupings of digital media items:

- **High Priority**: Always attempt to automatically transfer items with this designation to the device in question. If these items cannot be transferred to the device then it should be brought to the user's attention.

  Example 1: User right clicks on an album in the Shell or WMP and selects **Transfer**, and a dialog box appears where the user selects the device for transfer and picks High Priority.

  Example 2: In WMP the user selects the Auto Playlist: "All Music Added to My PC in the Last 90 days" and assigns it High Priority.

- **Low Priority**: Automatically transfer items with this designation to the device in question only if there is space available after all High Priority designates have been transferred.

  By Default, a user's whole music library is Low Priority

  Example 1: User right clicks on an album in WMP or Shell Music Area and selects **Transfer.** A dialog box appears where the user selects the device for transfer and picks Low Priority.

Microsoft Patent Pre-disclosure Document

Note: Hover the pointer over underlined section headings for more help and click on a link for a sample document.

Example 2: In a media transfer management application, user picks the rule: Everything Else not covered by Other Transfer Rules and assigns it Low Priority.

- **No Priority:** Never transfer items with this designation to the device in question, even if it is part of another collection with a higher priority.

  Example 1: User right clicks on an album, artist, or track in WMP or the Shell and selects **Transfer.** A Dialog box appears and the user selects the device or all devices and then picks **No Priority**. Any of the items the user assigned No Priority to will never be transferred to the device.

  Example 2: User right clicks on an Auto Playlist titled "Music not listened to in the last year." And selects **Transfer**. A dialog box appears and the user selects the device or all devices then picks **No Priority**.

Conflict Resolution:
Priority of Green on Green: Last requested is higher priority (optional sorts, Recently added, recently played, playcount, ratings). Additionally, Points system in related patent application can be used as conflict resolution prioriy.

Priority of Yellow on Yellow: Recently added is higher priority (optional sorts, Recently added, recently played, playcount, ratings). Additionally, Points system in related patent application can be used as conflict resolution priority.

Scenarios:

1. User adds device to PC sync system for first time
PC detects storage capacity on device
PC detects default music library on PC
PC assigns all music Low Priority
If Music Library < Device
Whole music library is transferred to device

If Music Library > Device
First X MB of the music library sorted by recently added (until device is full)

2. User assigns items No Priority
PC removes items from Client Device

3. User assigns items High Priority
If Low Priority items on device > Items user assigned High Priority to
PC removes enough Low Priority items (by reverse priority order) to make room for newly assigned High Priority Items.

If Low Priority items on device < Items user assigned High Priority to

PC notifies user that some high priority items on the device must be deleted to make room for newly requested items and gives user option to cancel.

PC removes all Low Priority items from device

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Microsoft Patent Pre-disclosure Document

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PC removes enough High Priority items (by reverse priority order) to make room for newly assigned High Priority Items.

[redacted]

Date of Conception:
March 24th, 2003

[redacted]

5. [redacted]

[redacted]

[redacted]

Attach other related documents and links here.

http://msweb/sites/thamera/Shared%20Documents/Crystal%20Media%20Profile%20Manager%20Scenarios.doc

http://msweb/sites/thamera/Shared%20Documents/Exploratory%20%20Design%20Presentation.ppt

Exhibit C

Disclosure Packet

MS#: 307644.1
Title: User Model for Prioritized Media Transfer to Portable Devices
Microsoft Team: Glen Johnson (GlenJ) and Laura Krč (a-lkrc)
Inventors (names and email aliases): Thamer A. Abanami (THAMERA), W. Michael Anderson (MIKKYA) and possibly Andrew L. Silverman (ANDREWSI) -

[redacted]

[redacted]

[redacted]

Recommended Summary:

Due to the advance of digital media technology and decreasing price of storage, PC users increasingly host digital media collections (music collection, pictures, videos, PVR TV, etc.) on their PCs. However, not all consumption of digital media occurs on a user's primary PC. More and more, users are in need of transferring all or some of their collection to an alternate device in order to consume their media away from their main PC. Filling these devices with a meaningful subset of a user's digital media collection can be laborious, especially in the case of the user's digital media collection being larger than the storage on the device. This invention pertains to a method and for managing the transfer of digital media items from one personal computing device to another, specifically the transfer of media from a client device with high capacity storage such as a desktop computer to one of smaller capacity, such as laptop, PDA, personal media player or similar remote computing devices. A priority model for automatic transfer of a select portion of a user's digital media collection to a client device is provided. It is assumed that some content can be more important than other content. Using a simple interface to explicitly and/or implicitly assign items to be transferred and/or media heuristics with a transfer priority, the user can assure that content that matters most will always be automatically transferred to the device, content that matters less will be used to dynamically fill remaining space on the remote device and content the user never wants on the device will never end up on the device.

Recommended ROMP Classification:

1.2.1 – Task Extraction & Analysis
1.3.2 – Media Player UI
7.3 – Storage Management

File by Date: **3/31/2004 (possible release in April 2004)**

Underlying Facts:

- Date of Conception – 3/24/03

[redacted]

[redacted]

Exhibit C

[redacted]

Attachments:

Music 3 Tier Priority
Auto Manage Patent

307644.1-645.1
Background Explorat

307644.1-645.1
Background Crystal M

[redacted]